5

<u>Abstract</u>

Methods for producing waveguides are disclosed. In one embodiment, a waveguide is produced by depositing a first metal layer on a substrate, depositing a sacrificial material on the first metal layer, depositing a second metal layer on the sacrificial material, the second metal layer contacting the first metal layer and defining therebetween a cavity for the waveguide, the cavity filled with the sacrificial material, and removing the sacrificial material.